Permit to Operate

FACILITY: C-1234 EXPIRATION DATE: 04/30/200

LEGAL OWNER OR OPERATOR: EQUILON PIPELINE COMPANY LLC

MAILING ADDRESS: 5005 BUSINESS PARK #200

BAKERSFIELD, CA 93309

FACILITY LOCATION: NW SEC. 17, T20S, R15E

COALINGA, CA 93210

FACILITY DESCRIPTION: PETROLEUM TRANSPORTATION

The Facility to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Opertae remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Executive Director / APCO

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Diector of Permit Services

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-0-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reportingperiod was necessary. [District Rule 1100, 6.1; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)], [Federally Enforceable Through Title V]
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (7/21/94). [District Rule 2010, 3.0 and 4.0; 2020; and County Rule 201 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031], [Federally Enforceable Through Title V]
- 7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520(6/15/95) [District Rules 2520, 9.6.2 and 1100, 7.0], [Federally Enforceable Through Title V]
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.8], [Federally Enforceable Through Title V]

- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.2], [Federally Enforceable Through Title V]
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3], [Federally Enforceable Through Title V]
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4], [Federally Enforceable Through Title V]
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliancewith the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5], [Federally Enforceable Through Title V]
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10], [Federally Enforceable Through Title V]
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must bekept under condition of the permit. [District Rule 2520, 9.14.2.1], [Federally Enforceable Through Title V]
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2], [Federally Enforceable Through Title V]
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3], [Federally Enforceable Through Title V]
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4], [Federally Enforceable Through Title V]
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (12/17/92), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)], [Federally Enforceable Through Title V]
- 23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
- 24. No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1 (12/17/92)), nor manufacture, blend, or repackage such coating for use within the District, whichcontains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 of Rule 4601 (12/17/92). [District Rule 4601, 5.2], [Federally Enforceable Through Title V]
- 25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
- 26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5], [Federally Enforceable Through Title V]
- 27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2 (12/17/92). [District Rule 4601, 6.1 and 6.2], [Federally Enforceable Through Title V]
- 28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official [District Rule 2520, 9.14.1and 10.0], [Federally Enforceable Through Title V]
- 29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
- 30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, [Federally Enforceable Through Title V]

- 31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 (4/25/96) unless specifically exempted undersection 4 of Rule 8020 (4/25/96). [District Rule 8020], [Federally Enforceable Through Title V]
- 32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030 (4/25/96), unless specifically exempted under section 4 of Rule 8030 (4/25/96). [District Rule 8030], [Federally Enforceable Through Title V]
- 33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 (4/25/96) unless specifically exempted under section 4 of Rule 8060 (4/25/96). [District Rule 8060], [Federally Enforceable Through Title V]
- 34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
- 35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17], [Federally Enforceable Through Title V]
- 36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
- 37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
- 38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), Rules 201, 202, 203, 204, 208, and 209 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin), Rule 410.1 (Kern), and Rule 423 (Kern, Fresno, Stanislaus, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 39. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92);2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (12/17/92); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 40. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-2-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

25.5 MMBTU/HR NATIONAL OIL HEATER #2, WITH NORTH AMERICAN MODEL 5131HCRF BURNER.

- Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this
 permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on
 any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2]
- 2. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3]
- 3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. If this unit is not fired on PUC or FERC regulated natural gas, then the hourly emissions shall be calculated by testing the sulfur content of the fuel and calculating the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rules 2520, 9.4.2 and 4301, 5.2.1], [Federally Enforceable Through Title V]
- 4. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2]
- 5. The sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880-71. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. The fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 7. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [Fresno County Rule 406 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, NOx emissions may be calculated using supplier certification of the nitrogen content and heating value, or using the results from weekly fuel tests for nitrogen content and heating value. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. If compliance with the NOx emission limit is demonstrated through the fuel nitrogen content testing and compliance has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be bi-annually. If a bi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 4301, 5.2.2, 5.3, and 5.5 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The nitrogen content of the oil being fired in the unit shall be determined using ASTM D3431-80. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. Crude oil consumption shall not exceed 170 gal/hour. [District NSR Rule], [Federally Enforceable Through Title V]
- 12. The sulfur content of the crude oil shall not exceed 1.1 % by weight. [District NSR Rule], [Federally Enforceable Through Title V]
- 13. Natural gas consumption shall not exceed 25.5 scf/hour. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Permittee shall record fuel oil sulfur content. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 15. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule], [Federally Enforceable Through Title V]

- 16. While firing on crude oil, the permittee shall inspect the heater exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, design functions, and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (Section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. If the unit is fired on natural gas, then the natural gas sulfur content shall be less than or equal to 3.3% by weight. [Fresno County Rule 406 and District Rule 4801], [Federally Enforceable Through Title V]
- 18. The sulfur content and higher heating value of each fuel source other than natural gas that is PUC-regulated shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for the fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 19. If the unit is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-3-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

37.5 MMBTU/HR NATIONAL OIL HEATER #3 WITH NORTH AMERICAN MODEL 513HCRG BURNER.

- Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the conditions of this
 permit shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on
 any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2]
- 2. Particulate matter emissions shall not exceed 0.1 grain/dscf, calculated to 12% CO2, nor 10 lb/hr. [District Rules 4201, 3.1 and 4301, 5.1 and 5.2.3]
- 3. Emissions of sulfur compounds from this unit shall not exceed 200 lb per hour, calculated as SO2. If this unit is not fired on PUC or FERC regulated natural gas, then the hourly emissions shall be calculated by testing the sulfur content of the fuel and calculating the maximum hourly emissions of sulfur compounds by multiplying the sulfur content of each fuel in lb/MMBtu by the maximum heat input rating of the unit. [District Rules 2520, 9.4.2 and 4301, 5.2.1], [Federally Enforceable Through Title V]
- 4. If the unit is fired on noncertified gaseous fuel and compliance with SOx emission limits is achieved through fuel sulfur content limitations, then the sulfur content of the gaseous fuel being fired in the unit shall be determined using ASTM D 1072-80, D 3031-81, D 4084-82, D 3246-81 or grab sample analysis by GC-FPD/TCD performed in the laboratory. [District Rule 2520, 9.4.2]
- 5. The sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 2880-71. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 6. The fuel higher heating value for each fuel shall be certified by third party fuel supplier or determined by: ASTM D 240-87 or D 2382-88 for liquid hydrocarbon fuels; ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rule 2520, 9.4.2; 4305, 6.2.1; and 4351, 6.2.1], [Federally Enforceable Through Title V]
- 7. The concentration of sulfur compounds in the exhaust from this unit shall not exceed 0.2% by volume as measured on a dry basis over a 15 minute period. [Fresno County Rule 406 and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. Nitrogen oxide (NOx) emissions shall not exceed 140 lb/hr, calculated as NO2. For residual and crude oil fired units, NOx emissions may be calculated using supplier certification of the nitrogen content and heating value, or using the results from weekly fuel tests for nitrogen content and heating value. Hourly emissions shall be calculated using the heating value, maximum rated unit capacity, and the following formula: lb NO2/1000 gal = 20.54 + 104.39 (N), where N is the weight % nitrogen in the fuel. If compliance with the NOx emission limit is demonstrated through the fuel nitrogen content testing and compliance has been demonstrated for 8 consecutive weeks for a fuel source, then the fuel testing frequency shall be bi-annually. If a bi-annual fuel content source test fails to show compliance, weekly testing shall resume. [District Rules 4301, 5.2.2, 5.3, and 5.5 and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 9. The nitrogen content of the oil being fired in the unit shall be determined using ASTM D3431-80. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 10. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. Crude oil consumption shall not exceed 170 gal/hour. [District NSR Rule], [Federally Enforceable Through Title V]
- 12. The sulfur content of the crude oil shall not exceed 1.1 % by weight. [District NSR Rule], [Federally Enforceable Through Title V]
- 13. Natural gas consumption shall not exceed 25.5 scf/hour. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Permittee shall record fuel oil sulfur content. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 15. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule], [Federally Enforceable Through Title V]

- 16. While firing on crude oil, the permittee shall inspect the heater exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the equipment is performing normal, design functions, and is being operated according to standard procedures and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (Section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. If the unit is fired on natural gas, then the natural gas sulfur content shall be less than or equal to 3.3% by weight. [Fresno County Rule 406 and District Rule 4801], [Federally Enforceable Through Title V]
- 18. The sulfur content and higher heating value of each fuel source other than natural gas that is PUC-regulated shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for the fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 19. If the unit is fired on PUC-regulated natural gas, then maintain on file copies of all natural gas bills. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-4-2 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

10.836 MILLION GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH7, FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS

- 1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
- 2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.1.2], [Federally Enforceable Through Title V]
- 3. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 sq. in. per foot of tank diameter and the width of any portion of any gap shall not exceed one and one-half (1-1/2) inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 sq. in. per foot of tank diameter and the width of any portion of any gap shall not exceed one-half (1/2) inch for a vapor mounted seal. [District Rule 4623, 5.1.3.1.1], [Federally Enforceable Through Title V]
- 4. If this unit is a welded tank, then the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 5. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 6. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 7. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 8. One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 9. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope of the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- Secondary seal shall have no openings, holes or tears in the seal or seal fabric. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 11. The geometry of the metallic shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 12. If this unit is a welded tank, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 13. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 14. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
- 15. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]

- All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
- 17. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annually. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 18. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 19. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 20. An operator shall reinspect a cover, seal, or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 21. Emissions from covers, seals, or lids which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 22. Any leak in a cover, seal, or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 24. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. A minimum of four (4) locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 5.1.4], [Federally Enforceable Through Title V]
- 26. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, and both the Reid and maximum true vapor pressure of such liquids. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 27. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. On a quarterly basis, true vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 29. On a quarterly basis, true vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining VaporPressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 30. This unit was constructed in 1968 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1968. Therefore, it is exempt from the requirements of 40 CFR 60. A permit shield is granted from the requirements of 40 CFR 60. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 31. When storing applicable organic liquids with true vapor pressure less than or equal to 1.5 psia, the requirements of District Rule 4623 shall not apply to this unit. This exemption applies to all conditions in this permit containing District Rule 4623 references. [District Rule 4623, 2.0], [Federally Enforceable Through Title V]
- 32. Before switching to the storage of organic liquids with true vapor pressure greater than 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 33. Within one week after switching from crude oil with TVP greater than 1.5 psia to crude oil with TVP less than or equal to 1.5 psia, TVP of the crude oil shall be determined using the CARB method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Chromatography or equivalent method approved by the District. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-5-2 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

10.836 MILLION GALLON (258,000 BBL) WELDED CRUDE OIL STORAGE TANK #CH8, FLOATING ROOF WITH PRIMARY METALLIC SHOE SEAL AND SECONDARY SEALS

- 1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
- 2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.1.2], [Federally Enforceable Through Title V]
- 3. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 sq. in. per foot of tank diameter and the width of any portion of any gap shall not exceed one and one-half (1-1/2) inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 sq. in. per foot of tank diameter and the width of any portion of any gap shall not exceed one-half (1/2) inch for a vapor mounted seal. [District Rule 4623, 5.1.3.1.1], [Federally Enforceable Through Title V]
- 4. If this unit is a welded tank, then the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 5. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 6. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 7. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 8. One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 9. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope of the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- Secondary seal shall have no openings, holes or tears in the seal or seal fabric. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 11. The geometry of the metallic shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 12. If this unit is a welded tank, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 13. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 14. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
- 15. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]

- All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [District Rule 4623, 6.1], [Federally Enforceable Through Title V]
- 17. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annually. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 18. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 19. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 20. An operator shall reinspect a cover, seal, or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 21. Emissions from covers, seals, or lids which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 22. Any leak in a cover, seal, or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 23. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 24. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. A minimum of four (4) locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District Rule 4623, 5.1.4], [Federally Enforceable Through Title V]
- 26. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, and both the Reid and maximum true vapor pressure of such liquids. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 27. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 28. On a quarterly basis, true vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 29. On a quarterly basis, true vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining VaporPressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 30. This unit was constructed in 1968 and has not been modified (as defined in 40 CFR 60.14) or reconstructed (as defined in 40 CFR 60.15) since 1968. Therefore, it is exempt from the requirements of 40 CFR 60. A permit shield is granted from the requirements of 40 CFR 60. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

- 31. When storing applicable organic liquids with true vapor pressure less than or equal to 1.5 psia, the requirements of District Rule 4623 shall not apply to this unit. This exemption applies to all conditions in this permit containing District Rule 4623 references. [District Rule 4623, 2.0], [Federally Enforceable Through Title V]
- 32. Before switching to the storage of organic liquids with true vapor pressure greater than 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 references. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 33. Within one week after switching from crude oil with TVP greater than 1.5 psia to crude oil with TVP less than or equal to 1.5 psia, TVP of the crude oil shall be determined using the CARB method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Chromatography or equivalent method approved by the District. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-6-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

10.8 MILLION GALLON WELDED CRUDE OIL STORAGE TANK #CH12, FLOATING ROOF WITH METALLIC SHOE PRIMARY SEAL AND GATX-TEC B SERRATED MULTIFINGERED SECONDARY SEAL.

- 1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
- 2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [40 CFR 60.112a(a)(1), District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 3. Roof shall be floating on the liquid (i.e., off the roof leg supports) at all times except during initial fill and when tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112a(a)(1)], [Federally Enforceable Through Title V]
- 4. Primary seal (lower seal) shall be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)], [Federally Enforceable Through Title V]
- 5. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed one and one-half (1-1/2) inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed one-half (1/2) inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A), District Rule 4623, 5.1.3.1.1], [Federally Enforceable Through Title V]
- 6. This unit is a welded tank with a metallic-shoe-type seal for which the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 7. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 8. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 9. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 10. If the primary seal used is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. [40 CFR 60.112a(a)(1)(i)(C), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 11. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope of the primary seal. [40 CFR 60.112a(a)(1)(i)(D), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 12. Secondary seal shall be installed above the primary seal. [40 CFR 60.112a(a)(1)(ii)(A)], [Federally Enforceable Through Title V]
- 13. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed one-half (1/2) inch. [40 CFR 60.112a(a)(1)(i)(B)], [Federally Enforceable Through Title V]
- 14. If the secondary seal is used in combination with a vapor-mounted primary seal, there shall be no gaps between the tank wall and the secondary seal. [40 CFR 60.112a(a)(1)(ii)(B)], [Federally Enforceable Through Title V]
- 15. Secondary seal shall have no openings, holes or tears in the seal or seal fabric. [40 CFR 60.112a(a)(2)(ii)(C), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 16. If the primary seal used is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 17. If this unit is a welded tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]

- 18. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 19. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(C)], [Federally Enforceable Through Title V]
- 20. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [40 CFR 60.112a(a)(1)(iv), District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
- 21. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [40 CFR 60.112a(a)(1)(iii), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 22. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [40 CFR 60.112a(a)(1)(iii), District Rule 4623, 6.1], [Federally Enforceable Through Title V]
- All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annually. [District Rule 2520, 9.4.2, District Rule 4623], [Federally Enforceable Through Title V]
- 24. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 25. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 26. An operator shall reinspect a cover, seal, or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 27. Emissions from covers, seals, or lids which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 28. Any leak in a cover, seal, or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 29. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 30. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 31. Automatic bleeder vents shall be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112a(a)(1)(iii)], [Federally Enforceable Through Title V]
- 32. Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. [40 CFR 60.112a(a)(1)(iii)], [Federally Enforceable Through Title V]
- 33. Operator shall perform gap measurements on primary seals within 60 days of the initial fill and at least once every 5 years thereafter. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill. [40 CFR 60.113a(a)(1)(i)(A), (B), and (C)], [Federally Enforceable Through Title V]

- 34. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C)], [Federally Enforceable Through Title V]
- 35. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)], [Federally Enforceable Through Title V]
- 36. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)], [Federally Enforceable Through Title V]
- 37. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)], [Federally Enforceable Through Title V]
- 38. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)], [Federally Enforceable Through Title V]
- 39. The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight (8) locations shall be made available. In all other cases, a minimum of four (4) locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District 4623, 5.1.4], [Federally Enforceable Through Title V]
- 40. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, and both the Reid and maximum true vapor pressure of such liquids. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 41. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 (F true vapor pressure shall be determined by Reid vapor pressure at 100 (F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 42. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining VaporPressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 43. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 44. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)], [Federally Enforceable Through Title V]
- 45. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.115a(c)], [Federally Enforceable Through Title V]
- 46. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992) and 40 CFR 60, Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 47. The requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 48. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 49. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 50. When storing applicable organic liquids with true vapor pressure less than 1.5 psia as measured on a quarterly basis using vapor pressure test methods described in this permit, the requirements of District Rule 4623 and 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit containing either District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 4623, 2.0; 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
- 51. Before switching to storage of organic liquids with true vapor pressure greater than or equal to 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

52.	Within one week after switching from crude oil with TVP greater than 1.5 psia to crude oil with TVP less than or equal to 1.5 psia, TVP of the crude oil shall be determined using the CARB method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Chromatography or equivalent method approved by the District. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
	FOLIII ON PIPELINE COMPANY LLC C-1234-6-1

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-7-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

10.8 MILLION GALLON WELDED CRUDE OIL STORAGE TANK #CH13, FLOATING ROOF WITH METALLIC SHOE PRIMARY SEAL AND GATX-TEC B SERRATED MULTIFINGERED SECONDARY SEAL.

- 1. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1], [Federally Enforceable Through Title V]
- 2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [40 CFR 60.112a(a)(1), District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 3. Roof shall be floating on the liquid (i.e., off the roof leg supports) at all times except during initial fill and when tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112a(a)(1)], [Federally Enforceable Through Title V]
- 4. Primary seal (lower seal) shall be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. [40 CFR 60.112a(a)(1)(i)], [Federally Enforceable Through Title V]
- 5. Accumulated area of gaps between tank wall and primary seal shall not exceed: 1) 10.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed one and one-half (1-1/2) inch, for a metallic shoe seal or a liquid-mounted seal; 2) 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed one-half (1/2) inch for a vapor mounted seal. [40 CFR 60.112a(a)(1)(i)(A), District Rule 4623, 5.1.3.1.1], [Federally Enforceable Through Title V]
- 6. This unit is a welded tank with a metallic-shoe-type seal for which the cumulative length of all gaps, between the tank shell and the primary seal: 1) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 7. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 8. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 9. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 10. If the primary seal used is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. [40 CFR 60.112a(a)(1)(i)(C), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 11. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope of the primary seal. [40 CFR 60.112a(a)(1)(i)(D), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 12. Secondary seal shall be installed above the primary seal. [40 CFR 60.112a(a)(1)(ii)(A)], [Federally Enforceable Through Title V]
- 13. If the secondary seal is used in combination with a metallic shoe or liquid-mounted primary seal, accumulated area of gaps between tank wall and the secondary seal shall not exceed 1.0 in2 per foot of tank diameter and the width of any portion of any gap shall not exceed one-half (1/2) inch. [40 CFR 60.112a(a)(1)(i)(B)], [Federally Enforceable Through Title V]
- 14. If the secondary seal is used in combination with a vapor-mounted primary seal, there shall be no gaps between the tank wall and the secondary seal. [40 CFR 60.112a(a)(1)(ii)(B)], [Federally Enforceable Through Title V]
- 15. Secondary seal shall have no openings, holes or tears in the seal or seal fabric. [40 CFR 60.112a(a)(2)(ii)(C), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 16. If the primary seal used is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 17. If this unit is a welded tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]

- 18. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 19. Operator shall be exempt from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal. [40 CFR 60.112a(a)(1)(ii)(C)], [Federally Enforceable Through Title V]
- 20. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [40 CFR 60.112a(a)(1)(iv), District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
- 21. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [40 CFR 60.112a(a)(1)(iii), District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 22. All openings in the roof used for sampling and gauging except pressure-vacuum valves, which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source with an instrument calibrated with methane in accordance with EPA Method 21. Emissions in excess of this limit shall be considered a leak. [40 CFR 60.112a(a)(1)(iii), District Rule 4623, 6.1], [Federally Enforceable Through Title V]
- All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annually. [District Rule 2520, 9.4.2, District Rule 4623], [Federally Enforceable Through Title V]
- 24. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 25. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 26. An operator shall reinspect a cover, seal, or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 27. Emissions from covers, seals, or lids which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 28. Any leak in a cover, seal, or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 29. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2; District Rule 4623], [Federally Enforceable Through Title V]
- 30. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 31. Automatic bleeder vents shall be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112a(a)(1)(iii)], [Federally Enforceable Through Title V]
- 32. Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. [40 CFR 60.112a(a)(1)(iii)], [Federally Enforceable Through Title V]
- 33. Operator shall perform gap measurements on primary seals within 60 days of the initial fill and at least once every 5 years thereafter. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with petroleum liquid and at least once every year thereafter. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill. [40 CFR 60.113a(a)(1)(i)(A), (B), and (C)], [Federally Enforceable Through Title V]

- 34. If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(C)], [Federally Enforceable Through Title V]
- 35. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3), Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)], [Federally Enforceable Through Title V]
- 36. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.113a(a)(1)(i)(D)], [Federally Enforceable Through Title V]
- 37. Operator shall provide the APCO with 30 days notice of the gap measurement to afford the District the opportunity to have an observer present. [40 CFR 60.113a(a)(1)(iv)], [Federally Enforceable Through Title V]
- 38. If the accumulated area of gaps or gap width exceed limits, operator shall submit a report to the APCO within 60 days of the date of measurement. Report should include identification of the vessel, reason vessel did not meet the specifications, and a description of the actions necessary to bring the storage vessel into compliance. [40 CFR 60.113a(a)(1)(i)(E)], [Federally Enforceable Through Title V]
- 39. The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of eight (8) locations shall be made available. In all other cases, a minimum of four (4) locations shall be made available. If the APCO suspects a violation may exist the APCO may require such further unobstructed inspection of the primary seal as may be necessary to determine the seal condition for its entire circumference. [District 4623, 5.1.4], [Federally Enforceable Through Title V]
- 40. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, and both the Reid and maximum true vapor pressure of such liquids. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 41. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 (F true vapor pressure shall be determined by Reid vapor pressure at 100 (F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 42. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining VaporPressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]
- 43. The operator of a fixed roof tank shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 44. Maximum true vapor pressure may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.115a(b)], [Federally Enforceable Through Title V]
- 45. Operator shall determine the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method from available data and record if the true vapor pressure is greater than 1.0 psia. [40 CFR 60.115a(c)], [Federally Enforceable Through Title V]
- 46. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992) and 40 CFR 60, Subpart Ka. A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 47. The requirements of 40 CFR 60 Subpart K and Kb do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 48. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992), and Rule 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 49. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 50. When storing applicable organic liquids with true vapor pressure less than 1.5 psia as measured on a quarterly basis using vapor pressure test methods described in this permit, the requirements of District Rule 4623 and 40 CFR 60 Subpart Ka shall not apply to this unit. This exemption applies to all conditions in this permit containing either District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 4623, 2.0; 40 CFR 60.112(a)], [Federally Enforceable Through Title V]
- 51. Before switching to storage of organic liquids with true vapor pressure greater than or equal to 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Ka references. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

Within one week after switching from crude oil with TVP greater than 1.5 psia to crude oil with TVP less than or equal to 1.5 psia, TVP of the crude oil shall be determined using the CARB method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Chromatography or equivalent method approved by the District. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
EQUIL ON PIRELINE COMPANY LLC C-1234-7-1

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-8-2 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

39.5 MMBTU/HR SOLAR CENTAUR MODEL 40S GAS TURBINE #1, WITH SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, USED FOR CRUDE OIL HEATING AND PUMPING.

- 1. Units shall be fired exclusively on PUC-quality natural gas or propane. [40 CFR 60.333], [Federally Enforceable Through Title V]
- Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.0], [Federally Enforceable Through Title V]
- Operator shall not exceed a NOx emission rate of 42 ppmvd @ 15% O2, excluding thermal stabilization and reduced load periods. [District Rule 4703, 5.1.1]
- 4. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081], [Federally Enforceable Through Title V]
- 5. HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 6. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20 or CARB Method 100, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 7. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 4703, 6.2.4]
- Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3]
- 10. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 11. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)], [Federally Enforceable Through Title V]
- 12. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required in this permit. All reports shall be postmarked by the 30th day after each calendar half (or quarter, as appropriate). [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 13. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. Fuel consumption shall not exceed 650,000 scf/day of natural gas or 260,000 scf/day of propane. [District NSR Rule], [Federally Enforceable Through Title V]
- 16. Permittee shall record fuel usage amount and type. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. The operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). [District Rule 4703, 5.1]
- 18. The District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling. [District Rule 1081, 7.1], [Federally Enforceable Through Title V]
- 19. Source test reports must be submitted to the District within 60 days of completion of field testing. [District Rule 1081, 7.2], [Federally Enforceable Through Title V]

- 20. Operator shall not exceed a SOx emission rate of 150 ppmvd @ 15% O2. [40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 21. The owner or operator shall determine compliance with the sulfur content standard using the following methods: ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 22. No owner or operator shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight. [40 CFR 60.333(b)], [Federally Enforceable Through Title V]
- 23. If the turbine is not fired on a PUC-regulated fuel, then the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)], [Federally Enforceable Through Title V]
- 24. If the turbine is fired on a PUC-regulated fuel, then maintain on file copies of fuel bills. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. Carbon Monoxide (CO) emissions shall be determined by EPA Methods 10, 10B, or CARB Method 100. [District Rule 4703, 6.4]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-9-2 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

39.5 MMBTU/HR SOLAR CENTAUR MODEL 40S GAS TURBINE #2 WITH SOLONOX DRY LOW-NOX COMBUSTION SYSTEM, USED FOR CRUDE OIL HEATING AND PUMPING.

- 1. Units shall be fired exclusively on PUC-quality natural gas or propane. [40 CFR 60.333], [Federally Enforceable Through Title V]
- Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201, 3.0], [Federally Enforceable Through Title V]
- Operator shall not exceed a NOx emission rate of 42 ppmvd @ 15% O2, excluding thermal stabilization and reduced load periods. [District Rule 4703, 5.1.1]
- 4. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [District Rule 1081], [Federally Enforceable Through Title V]
- 5. HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81. [40 CFR 60.335(b) and District Rule 4703, 6.4.5], [Federally Enforceable Through Title V]
- 6. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20 or CARB Method 100, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4], [Federally Enforceable Through Title V]
- 7. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 8. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 4703, 6.2.4]
- Permittee shall submit to the APCO the information correlating the control system operating parameters to the associated measured NOx output. [District Rule 4703, 6.2.3]
- 10. Permittee shall install, operate and maintain in calibration a system which continuously measures and records elapsed time of turbine operation. [40 CFR 60.334 and District Rule 4703, 6.2.1], [Federally Enforceable Through Title V]
- 11. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)], [Federally Enforceable Through Title V]
- 12. Permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form to the APCO semiannually, except when more frequent reporting is specifically required in this permit. All reports shall be postmarked by the 30th day after each calendar half (or quarter, as appropriate). [40 CFR 60.334(c)], [Federally Enforceable Through Title V]
- 13. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 14. Use of oil fired heaters permitted under C-1234-2 and C-1234-3 shall be limited to 30 days/year for maintenance of turbines permitted under C-1234-8 and C-1234-9. [District NSR Rule], [Federally Enforceable Through Title V]
- 15. Fuel consumption shall not exceed 650,000 scf/day of natural gas or 260,000 scf/day of propane. [District NSR Rule], [Federally Enforceable Through Title V]
- 16. Permittee shall record fuel usage amount and type. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 17. The operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). [District Rule 4703, 5.1]
- 18. The District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling. [District Rule 1081, 7.1], [Federally Enforceable Through Title V]
- 19. Source test reports must be submitted to the District within 60 days of completion of field testing. [District Rule 1081, 7.2], [Federally Enforceable Through Title V]

- 20. Operator shall not exceed a SOx emission rate of 150 ppmvd @ 15% O2. [40 CFR 60.333(a)], [Federally Enforceable Through Title V]
- 21. The owner or operator shall determine compliance with the sulfur content standard using the following methods: ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81. [40 CFR 60.335(d)], [Federally Enforceable Through Title V]
- 22. No owner or operator shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight. [40 CFR 60.333(b)], [Federally Enforceable Through Title V]
- 23. If the turbine is not fired on a PUC-regulated fuel, then the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)], [Federally Enforceable Through Title V]
- 24. If the turbine is fired on a PUC-regulated fuel, then maintain on file copies of fuel bills. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 25. Carbon Monoxide (CO) emissions shall be determined by EPA Methods 10, 10B, or CARB Method 100. [District Rule 4703, 6.4]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-10-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

465 BHP CUMMINS MODEL NTTA-855G DIESEL ENGINE FOR EMERGENCY ELECTRICAL POWER

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)]
- 3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880-71. [District Rule 2520, 9.4.2]
- 6. Records of operating hours shall be kept for units operating less than 200 hours per year. [District Rule 2520, 9.4.2]
- 7. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2]
- 8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 10. The engine shall be operated only for maintenance, test, and required regulatory purposes, and during emergency situations. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. [District Rule 4701, 3.18, District NSR Rule], [Federally Enforceable Through Title V]
- 12. The permittee shall maintain records of hours of emergency and non-emergency operation and shall make such records readily available to district staff upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-11-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

213 BHP CATERPILLAR MODEL 3306 DIESEL ENGINE FOR EMERGENCY FIRE WATER SERVICE

- 1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)]
- 2. Particulate matter emissions shall not exceed 0.1 gr/dscf in concentration at the point of discharge. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)]
- Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)]
- 4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2]
- 5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880-71. [District Rule 2520, 9.4.2]
- 6. Records of operating hours shall be kept for units operating less than 200 hours per year. [District Rule 2520, 9.4.2]
- 7. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2]
- 8. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 9. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2]
- 10. The engine shall be operated only for maintenance, test, and required regulatory purposes, and during emergency situations. [District NSR Rule], [Federally Enforceable Through Title V]
- 11. Operation of the engine for maintenance and testing purposes shall not exceed 200 hours per year. [District Rule 4701, 3.18 and District NSR Rule], [Federally Enforceable Through Title V]
- 12. The permittee shall maintain records of hours of emergency and non-emergency operation and shall make such records readily available to district staff upon request. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-12-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

3.36 MILLION GALLON (80,000 BBL) FIXED ROOF TANK #80GC11, 114.5' DIAMETER X 30' HEIGHT. EMERGENCY STANDBY USE ONLY

- 1. This tank shall not be used more than two times in any 12 month period. [District Rule 4623, 3.2], [Federally Enforceable Through Title V]
- 2. Each use of the tank shall not exceed 30 days. [District Rule 4623, 4.2.1], [Federally Enforceable Through Title V]
- 3. The tank shall be equipped with a pressure relief valve set to within 10 percent of the maximum allowable working pressure of the tank. [District Rule 4623, 4.2.1], [Federally Enforceable Through Title V]
- 4. The operator shall keep accurate records of average monthly throughput and record the date when fluids are pumped into the tank. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 5. Notify the District within 24 hours of emergency use of this tank. [District Rule 4623, 3.2], [Federally Enforceable Through Title V]
- 6. True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 degrees F true vapor pressure shall be determined by Reid vapor pressure at 100 degrees F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 7. True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30 deg, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining VaporPressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990. [District Rule 4623, 6.2.3], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-1234-13-1 **EXPIRATION DATE:** 04/30/2004

EQUIPMENT DECRIPTION:

5.04 MILLION GALLON (120,000 BBL) WELDED CRUDE OIL STORAGE TANK #120CH-14, EQUIPPED WITH EXTERNAL FLOATING ROOF WITH METALLIC SHOE TYPE PRIMARY AND WIPER TYPE SECONDARY SEAL

- 1. Upon initial start-up, the operator shall furnish the APCO with a report describing the control equipment and certifying the control equipment meets the specifications of 40CFR 60.112b(a)(2) and 60.113b(b)(2), (b)(3), and (b)(4). [40 CFR 60.115b(b)(1)], [Federally Enforceable Through Title V]
- 2. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1], [Federally Enforceable Through Title V]
- 3. Roof shall be floating on the liquid at all times (ie., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when tank is completely emptied and subsequently refilled. [40 CFR 60.112b(a)(2)(iii)], [Federally Enforceable Through Title V]
- 4. Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40 CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)], [Federally Enforceable Through Title V]
- 5. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm2 per meter of tank diameter, and the width of any gap shall not exceed 3.81 cm. [40 CFR 60.113b(b)(4)(i)], [Federally Enforceable Through Title V]
- 6. For a closure device, the gap between tank shell and primary seal shall not exceed: 1.) One and one-half (1-1/2) inches for a metallic-shoetype seal on welded tanks. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 7. If this unit is a welded tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal:

 1.) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2.) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1], [Federally Enforceable Through Title V]
- 8. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1.3.1.1, 5.1.3.2.1, and 5.1.3.3.1], [Federally Enforceable Through Title V]
- 9. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1.3.1.2, 5.1.3.2.2, and 5.1.3.3.2], [Federally Enforceable Through Title V]
- 10. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1.3.1.2, 5.1.3.2.2, and 5.1.3.3.2], [Federally Enforceable Through Title V]
- 11. If the primary seal is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches (61 cm) above the stored liquid surface. [District Rule 4623, 5.1.3.1.3 and 5.1.3.2.3], [Federally Enforceable Through Title V]
- 12. Primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric, shall have no openings, holes or tears. [District Rule 4623, 5.1.3.1.4, 5.1.3.2.4, and 5.1.3.3.3], [Federally Enforceable Through Title V]
- 13. Secondary seal shall have no openings, holes or tears in the seal or seal fabric. [District Rule 4623, 5.1.3.1.4, 5.1.3.2.4, and 5.1.3.3.3], [Federally Enforceable Through Title V]
- 14. Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40 CFR 60.112b(a)(2)(i)(B)], [Federally Enforceable Through Title V]
- 15. If the primary seal is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1.3.1.4 and 5.1.3.2.3], [Federally Enforceable Through Title V]
- 16. If this unit is a welded tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1.3.1.5], [Federally Enforceable Through Title V]
- 17. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. [40 CFR 60.113b(b)(4)(ii)(B)], [Federally Enforceable Through Title V]

- 18. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1.3.1.6, 5.1.3.2.6, and 5.1.3.3.5], [Federally Enforceable Through Title V]
- 19. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.1.6], [Federally Enforceable Through Title V]
- 20. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [District Rule 4623, 5.1.5], [Federally Enforceable Through Title V]
- 21. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source inaccordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.1.5], [Federally Enforceable Through Title V]
- 22. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annually. [District Rule 2520, 9.4.2; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 23. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 24. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1) Zero air (less than 10 ppm of hydrocarbon in air); and 2) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.4.2l; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 25. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 26. An operator shall reinspect a cover, seal or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 27. Emissions from covers, seals and lids which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.4.2; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 28. Any leak in a cover seal or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 29. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2; District Rule 4623; 40 CFR 60 Subpart Kb], [Federally Enforceable Through Title V]
- 30. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 31. Automatic bleeder vents shall be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112b(a)(2)(ii)], [Federally Enforceable Through Title V]
- 32. Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. [40 CFR 60.112b(a)(2)(ii)], [Federally Enforceable Through Title V]
- 33. Operator shall perform gap measurements on primary seals during hydrostatic testing of the vessel or within 60 days of the initial fill with a volatile organic liquid (VOL) and at least once every 5 years thereafter. [40 CFR 60.113b(b)(1)(i)], [Federally Enforceable Through Title V]

- 34. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with VOL and at least once every year thereafter. [40 CFR 60.113b(b)(1)(ii)], [Federally Enforceable Through Title V]
- 35. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR60.113b(b)(1)(iii)], [Federally Enforceable Through Title V]
- 36. Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40 CFR 60.113b(b)(5)], [Federally Enforceable Through Title V]
- 37. If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40 CFR 60.113b(b)(6)(i)], [Federally Enforceable Through Title V]
- 38. Operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. [40 CFR 60.113b(b)(6)], [Federally Enforceable Through Title V]
- 39. For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40 CFR 60.113b(b)(6)(ii)], [Federally Enforceable Through Title V]
- 40. If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by expressmail so it is received by the APCO at least 7 days prior to the refilling. [40 CFR 60.113b(b)(6)(ii)], [Federally Enforceable Through Title V]
- 41. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(2)(iii)], [Federally Enforceable Through Title V]
- 42. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3) Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)], [Federally Enforceable Through Title V]
- 43. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40 CFR 60.115b(b)(3)], [Federally Enforceable Through Title V]
- 44. Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40 CFR 60.115b(b)(2)], [Federally Enforceable Through Title V]
- 45. After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40 CFR 60.115b(b)(4)], [Federally Enforceable Through Title V]
- 46. If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40 CFR 60.113b(b)(4)], [Federally Enforceable Through Title V]
- 47. Operator shall maintain, for the life of the source, a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 48. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, the Reid vapor pressure and the maximum true vapor pressure of such liquids. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 49. True vapor pressure of crude oil or refined petroleum products shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 (F true vapor pressure shall be determined by Reid vapor pressure at 100 (F and ARB approved calculations. [District Rule 4623, 6.2.2], [Federally Enforceable Through Title V]
- 50. Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40 CFR 60.116b(e)(2)], [Federally Enforceable Through Title V]
- 51. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879-83, or by using an appropriate method approved by EPA. [40 CFR 60.116b(e)(3)], [Federally Enforceable Through Title V]

- 52. For vessels operated above or below ambient temperatures, the operator shall determine the maximum true vapor pressure as calculated based upon highest expected calendar month average of the storage temperature. For vessels operated at ambient temperature, the maximum true vapor pressure shall be calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40 CFR 60.116b(e)(1)], [Federally Enforceable Through Title V]
- 53. Maximum true vapor pressure for crude oil or refined petroleum products may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)], [Federally Enforceable Through Title V]
- 54. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40 CFR 60.116b(f)], [Federally Enforceable Through Title V]
- 55. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years, except as otherwise specified by this permit. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 56. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40 CFR 60.116b(d)], [Federally Enforceable Through Title V]
- 57. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992) and 40CFR60, Subpart Kb (except 60.115b(b)(1)). A permit shield is granted from this requirement. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 58. The requirements of 40CFR60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 59. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]
- 60. This tank shall only store liquid with a true vapor pressure (TVP) of 5.7 psia or less under all storage conditions. [District NSR Rule], [Federally Enforceable Through Title V]
- 61. TVP of crude oil shall be determined annually and, within one week after switching from storage of heavy crude oil to light crude oil, or vice versa, using the CARB method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Chromatography or equivalent method approved by the District. [District NSR Rule], [Federally Enforceable Through Title V]
- 62. The results of TVP sampling shall be submitted to the District at the same time as submittal of the monthly and annual throughput summaries. [District NSR Rule], [Federally Enforceable Through Title V]
- 63. All equipment shall be maintained in good working order so as to minimize VOC emissions to the atmosphere. [District NSR Rule], [Federally Enforceable Through Title V]
- 64. Maximum daily throughput of crude oil with a true vapor pressure of 1.28 psia or less shall not exceed 45,000 barrels. [District NSR Rule], [Federally Enforceable Through Title V]
- 65. Maximum daily throughput of crude oil with a true vapor pressure of between 1.8 and 5.7 shall not exceed 24,500 barrels. [District NSR Rule], [Federally Enforceable Through Title V]
- 66. Records of daily throughput of crude oil and the type of crude oil stored shall be maintained. [District 2520, 9.5.2], [Federally Enforceable Through Title V]
- 67. Prior to implementation of this ATC, permittee shall supply VOC emission reduction credit offsets equivalent to the amount of 767 lb-VOC/qtr.

 The actual amount of offsets shall be determined by applying the distance offset ratio per Table 1 of Rule 2201 dated 6/15/95. [District NSR Rule], [Federally Enforceable Through Title V]
- 68. When storing applicable organic liquids with true vapor pressure less than or equal to 1.5 psia as measured on a quarterly basis using vapor pressure test methods described in this permit, the requirements of District Rule 4623 shall not apply to this unit. This exemption applies to all conditions in this permit containing District Rule 4623 references but not 40 CFR 60 Subpart Kb references. [District Rule 4623, 2.0], [Federally Enforceable Through Title V]
- 69. When storing applicable organic liquids with true vapor pressure less than 0.75 psia as measured on a quarterly basis using vapor pressure test methods described in this permit, the requirements of 40 CFR 60 Subpart Kb and District Rule 4623 shall not apply to this unit. This exemption applies to all conditions in this permit containing 40 CFR 60 Subpart Kb references or District Rule 4623 references. [40 CFR 60.112(b); District Rule 4623, 2.0], [Federally Enforceable Through Title V]
- 70. Before switching to storage of organic liquids with true vapor pressure greater than 1.5 psia, all covers, seals, and lids shall be inspected by the facility operator to ensure compliance with the provisions of this permit. This includes all conditions containing District Rule 4623 or 40 CFR 60 Subpart Kb references. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]

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